Amendments to the Drawings

Replacement sheets for Figs. 1-11 are enclosed which formalize the drawings which were submitted with the application. No other changes have been made.

REMARKS

The specification has been amended to correct a typographical error.

Replacement sheets are submitted herewith which formalize the drawings currently on file. No other changes have been made. Approval by the Examiner is respectfully requested.

Claims 1-4 and 9 were rejected under 35 USC 103(a) as being unpatentable over Kotlikov et al (US 2003/0012453 A1) in combination with Shimazu et al (US 005724454A). Claim 5 was rejected under 35 USC 103(a) as being unpatentable over Kotlikov et al (US 20030012453 A1) and Shimazu et al (US005724454A) in combination with Luo et al (US 20030053686A1). Claims 7 and 8 were rejected under 35 USC 103(a) as being unpatentable over Luo (US 20030152289A1) and Miceli et al (US 20030128149A1). Claim 6 was rejected under 35 USC 103(a) as being unpatentable over the combination of Kotlikov et al (US 2003/0012453 A1) and Shimazu et al (US 005724454A) in combination with the combination of Luo (US 20030152289A1) and Miceli et al (US 20030128149A1).

Applicant will first discuss claim 1 and the rejection thereof. Claim 1 has been amended to indicate that the pixels in the sky region are automatically identified and hanging wire regions are also automatically identified. The hanging wire regions are used to either determine the orientation of the pixel image or to replace such hanging wire pixels. Kotlikov et al relates to a method for removing defects such as scratches, stains or creases from an image. As understood, a user or operator first identifies an object where there is a defect. Then Kotlikov et al overlays a frame over at least a portion of the object that contains the defect. They then proportions the frame into object and nonobject regions and then uses pixels to correct the defects. There is nothing in the Kotlikov et al disclosure which automatically detects sky regions or detects hanging wire regions. Manual intervention is required in order to identify the defect in Kotlikov et al. Furthermore, Kotlikov et al has nothing to do with determining the orientation of the digital image using the automatically detected hanging wires and automatically detected sky regions.

The Examiner states that Shimazu et al "working the same field of endeavor of color image correction, does describe replacing hanging wire pixels in sky regions." In col. 26, line 2, of Shimazu et al says the principles of the present invention may be applicable to eliminating undesirable image areas, for example, an electric wire. More generally, the Shimazu et al invention is applied to elimination of an irregularity or unevenness from a contour of an image. The whole thrust of the Shimazu et al is a contour extraction method to correct colors in a multitone region by retouching the image. There is nothing in the detailed description of Shimazu et al that would provide any indication of the detection or removal or use of hanging wires. A mere statement that it may be applicable would provide no teachings to one skilled in the art. Applicant can find no teaching that can be used, without hindsight, to provide the subject matter of claim 1. Accordingly, Applicant fails to see how one skilled in the art with the teaching of Shimazu et al in hand could combine such teachings with Kotlikov et al to produce the subject matter of claim 1.

With respect to claim 2, and somewhat similar to claim 1, pixels are automatically identified in sky regions and occlusions are also automatically identified. A model is developed from the identified sky pixels and used to replace the values of the pixels in the sky occlusion regions. Neither Kotlikov et al or Shimazu et al automatically identify sky region pixels and sky occlusions. Furthermore neither of them replace sky occlusion regions. Kotlikov et al as discussed above, has an operator overly portions of an object containing the defect. Kotlikov et al has nothing to do with automatically detecting sky regions and occlusions in such sky regions. Shimazu et al eliminates defects of irregularities in an image by a contour correction method. There is nothing in this reference that would suggest the automatic detection of sky regions, occlusions in the sky regions and the removal of such occlusions. Accordingly, it is believed that neither of these references taken singly or in combination disclose or suggest the present invention. Claims 3, 4, 5 and 6 depend on claim 2 and should be allowed with it.

Luo et al was used in combination with Kotlikov et al and Shimazu et al in rejecting claim 5. Luo et al describes a model which initially classifies pixels of sky and then further adds to that initial sky region more pixels so that result is a larger sky region than what was originally classified.

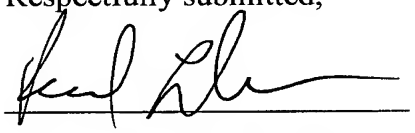
Claim 9 has been amended to automatically identify pixels of sky regions and automatically identifying hanging wire regions. A model is developed and used to replace the pixels of the hanging wire regions. The same reason that claim 1 is believed to be patentable over the combination of Kotlikov et al and Shimazu et al apply here. Claim 9 does not include the feature of determining orientation based on hanging wire detection. Other than that, the subject is quite similar to claim 1 and should be allowable.

Claims 7 and 8 were rejected in view of Luo '289 in view of Miceli et al. Claim 7 has been amended in similar fashion as claim 1 discussed above. At the outset, the Examiner should note that Luo '289 was and continues to be assigned to the Eastman Kodak Company as does the present invention. Therefore, Applicant believes that under 35 USC 103(c) Luo '289 is not a reference. Miceli et al relates to propagating a radar signal and receiving reflective radar signals from overhead lines to perform an inspection of electrical grid systems. Applicant fails to see how that has anything to do with determining the orientation of a digital color image having pixels by using hanging wire regions. Accordingly, it is believed that claim 7 and dependent claim 8 define unobvious subject matter.

It is believed that these changes now make the claims clear and definite and, if there are any problems with these changes, Applicants' attorney would appreciate a telephone call.

In view of the foregoing, it is believed none of the references, taken singly or in combination, disclose the claimed invention. Accordingly, this application is believed to be in condition for allowance, the notice of which is respectfully requested.

Respectfully submitted,



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